

**AMENDMENTS TO THE CLAIMS:**

The listing of claims provided below will replace all prior versions, and listings, of claims in the application.

**Listing of Claims:**

1-30. (Canceled)

31. (Currently amended) A method for reducing  $\beta$ -cell dysfunction in an individual with a pancreatic disorder, wherein said dysfunction results in diabetes, comprising:

- (i) introducing into a  $\beta$ -cell a nucleic acid molecule encoding a protein selected from the group consisting of the naturally-occurring interleukin-1 receptor antagonist protein (IRAP), a soluble interleukin-1 receptor decoy protein, a soluble type I tumor necrosis factor alpha receptor decoy protein, a human insulin growth factor I (IGF-I) protein, a human insulin-like growth factor II (IGF-II) protein, a signal transducer and activator of transcription 6 (STAT-6) protein, and a nuclear factor of activated T cell (NF-AT) protein; and
- (ii) transplanting the  $\beta$ -cell of step (a) (i) into the individual so as to reduce  $\beta$  cell dysfunction.

32-34. (Canceled)

35. (Currently amended) A method for reducing Fas mediated  $\beta$ -cell apoptosis in an individual with a pancreatic disorder, wherein said  $\beta$ -cell apoptosis results in diabetes, comprising:

- (i) introducing into a  $\beta$ -cell a nucleic acid molecule encoding a protein selected from the group consisting of the naturally-occurring interleukin-1 receptor antagonist

protein (IRAP), a soluble interleukin-1 receptor decoy protein, a soluble type I tumor necrosis factor alpha receptor decoy protein, a human insulin growth factor I (IGF-I) protein, a human insulin-like growth factor II (IGF-II) protein, a signal transducer and activator of transcription 6 (STAT-6) protein, and a nuclear factor of activated T cell (NF-AT) protein; and

(ii) transplanting the  $\beta$ -cell of step (a) (i) into the individual so as to reduce  $\beta$  cell apoptosis.

36-38. (Canceled)

39. (Previously presented) A mammalian  $\beta$ -cell comprising a recombinant nucleic acid molecule, said nucleic acid molecule encoding and expressing a protein selected from the group consisting of the naturally-occurring interleukin-1 receptor antagonist protein (IRAP), a soluble interleukin-1 receptor decoy protein, a soluble type I tumor necrosis factor alpha receptor decoy protein, a human insulin growth factor I (IGF-I) protein, a human insulin-like growth factor II (IGF-II) protein, a signal transducer and activator of transcription 6 (STAT-6) protein, and a nuclear factor of activated T cell (NF-AT) protein, wherein the expression of the nucleic acid reduces  $\beta$ -cell dysfunction in an individual with a pancreatic disorder in which said dysfunction results in diabetes.

40-42. (Canceled)